

ABSTRACT

The invention relates to a process for the preparation of a peracid, perester or diacylperoxide and is characterized in that a mixed anhydride of formula

5 $R^1[C(O)OC(O)OR^2]_n$, or $[R^3C(O)OC(O)O]_pR^4$ is contacted with a hydroperoxide of formula $R^5[OOH]_m$ in the presence of a base, wherein R^1 represents a mono-, di-, tri- or tetravalent C_1-C_{19} hydrocarbon group, optionally containing one or more hetero atoms, n is 1-4, R^2 represents a C_1-C_{20} hydrocarbon group, optionally containing one or more hetero atoms, R^3 represents a C_1-C_{19}

10 hydrocarbon group, optionally containing one or more hetero atoms, R^4 represents a di-, tri- or tetravalent C_1-C_{20} hydrocarbon group, optionally containing one or more hetero atoms, p is 2-4, R^5 represents hydrogen or a mono- or divalent C_3-C_{18} tertiary alkyl or C_2-C_{20} acyl group, in which the tertiary alkyl or acyl group may optionally contain one or more hetero atoms, m is 1 or

15 2, and if R^5 represents hydrogen, m is 1, provided that if the hydroperoxide is an α,α' -dihydroperoxyperoxide, the reaction is not carried out in an inert two-phase solvent system comprising a polar solvent and an apolar solvent. The invention also relates to a hydroxyperacid, hydroxyperester, and hydroxydiacylperoxide obtainable by said process and the use of said

20 hydroxyperoxides.